

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	Elaine S. MASON	Confirmation No.:	3006
Application No.:	09/805,632	Examiner:	Jocelyn Greimel
Filed:	March 14, 2001	Group Art Unit:	3693
Attorney Docket No.:	COS99039		

For: EARLY-PAYMENT DISCOUNT FOR E-BILLING SYSTEM

**APPEAL BRIEF**

Commissioner for Patents  
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated March 11, 2009 and the Pre-Appeal Panel Decision of April 30, 2009.

**I. REAL PARTY IN INTEREST**

The real party in interest of the present application, solely for purposes of identifying and avoiding potential conflicts of interest by board members due to working in matters in which the member has a financial interest, is Verizon Communications Inc. and its subsidiary companies, which currently include Verizon Business Global, LLC (formerly MCI, LLC) and Cellco Partnership (doing business as Verizon Wireless, and which includes as a minority partner affiliates of Vodafone Group Plc). Verizon Communications Inc. or one of its subsidiary companies is an assignee of record of the present application.

**II. RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any related appeals and interferences.

**III. STATUS OF THE CLAIMS**

Claims 1-42 are pending in this appeal. No claim is allowed. This appeal is therefore taken from the final rejection of claims 1-42 on November 7, 2008.

**IV. STATUS OF AMENDMENTS**

All amendments have been entered.

**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The claimed invention addresses problems associated with on-line billing. In particular, the invention addresses the problem providing incentives to customers for making early on-line bill payments by offering discounts for early payment of bills. The discount is based upon both an invoice amount and an invoice due date. In other embodiments, different discounts are offered based upon different amounts of time measured from the invoice date.

Independent claim 1 provides for the following:

1. A method for providing an on-line billing system (See, e.g., Specification, ¶ [24]; Fig. 1, 100, 110), the method comprising:

retrieving customer invoice information that includes an invoice due date and an invoice amount (See, e.g., Specification, ¶¶ [10], [29]-[39]; Figs. 3A-3C, 4A-4E);

calculating a discount amount based upon the invoice amount (See, e.g., Specification, ¶¶ [10], [29]-[39]; Figs. 3A-3C, 4A-4E);

displaying the calculated discount amount (See, e.g., Specification, ¶¶ [10], [29]-[39]; Figs. 3A-3C, 4A-4E, specifically 4B, item 437, and 4C, item 462); and

selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date (See, e.g., Specification, ¶¶ [10], [29]-[39]; Figs. 3A-3C, 4A-4E);

Dependent claim 2 provides for the following:

2. The method according to claim 1, wherein the discount amount is valid for a pre-defined time period (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 3 provides for the following:

3. The method according to claim 2, further comprising:  
calculating an expiration date defining the pre-defined time period (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484); and  
displaying the expiration date (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 4 provides for the following:

4. The method according to claim 3, wherein the discount amount is based upon a percentage of the invoice amount, further comprising:

calculating another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date (See, e.g., Specification, ¶ [36]); and

automatically applying either of the discount amounts based upon time of receipt of the payment input (See, e.g., Specification, ¶ [36]).

Dependent claim 5 provides for the following:

5. The method according to claim 1, further comprising:

determining whether criteria for receiving the discount amount are satisfied for a corresponding customer (See, e.g., Specification, ¶¶ [24], [26]-[29], [33]-[36]; Figs. 4A-4E); and

selectively applying the discount amount based upon the determining step (See, e.g., Specification, ¶¶ [24], [26]-[29], [33]-[36]; Figs. 4A-4E).

Dependent claim 6 provides for the following:

6. The method according to claim 5, wherein the criteria in the determining step include maintaining a zero outstanding charge by the customer (See, e.g., Specification, ¶¶ [36], [37]).

Dependent claim 7 provides for the following:

7. The method according to claim 1, further comprising:

executing an electronic fund transfer in response to the step of selectively receiving the payment input (See, e.g., Specification, ¶¶ [37]-[40]).

Independent claim 8 provides for the following:

8. A server apparatus for providing an on-line billing system, the server apparatus comprising:

a communication interface configured to retrieve customer invoice information that includes an invoice due date and an invoice amount (See, e.g., Specification, ¶¶ [11], [24],[29]-[39]; Fig. 1, firewall 125a; Figs. 3A-3C, 4A-4E); and

a processor coupled to the communication interface and configured to calculate a discount amount based upon the invoice amount, wherein the calculated discount amount is displayed via a client, and a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date is selectively received from the client (See, e.g., Specification, ¶¶ [11], [25], [27], [29]-[39]; Fig. 1, 2, Figs. 3A-3C, 4A-4E).

Dependent claim 9 provides for the following:

9. The server apparatus according to claim 8, wherein the discount amount is valid for a pre-defined time period (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 10 provides for the following:

10. The server apparatus according to claim 9, wherein the processor is configured to calculate an expiration date defining the pre-defined time period, the expiration date being displayed via the client (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 11 provides for the following:

11. The server apparatus according to claim 10, wherein the discount amount is based upon a percentage of the invoice amount, the processor being configured to calculate another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date, either of the discount amounts being automatically applied based upon time of receipt of the payment input (See, e.g., Specification, ¶ [36]).

Independent claim 15 provides for the following:

15. An e-billing system comprising:

a database configured to store customer invoice information that includes an invoice due date and an invoice amount (See, e.g., Specification, ¶¶ [12], [26],[27]; Fig. 3B. item 210);

a server communicating with the database, the server being configured to retrieve the customer invoice information from the database, the server being configured to calculate a discount amount based upon the invoice amount (See, e.g., Specification, ¶¶ [12], [26]; Fig. 3C. item 250); and

a client communicating with the server, the client being configured to display the discount amount, and to transmit a payment input that authorizes a payment according to the calculated discount amount to the server in advance of the invoice due date (See, e.g., Specification, ¶¶ [12], [27], [33], [34]; Fig. 3C. item 99).

Dependent claim 16 provides for the following:

16. The system according to claim 15, wherein the discount amount is valid for a pre-defined time period (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 17 provides for the following:

17. The system according to claim 16, wherein the server is configured to calculate an expiration date defining the pre-defined time period, the expiration date being displayed via the client (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 18 provides for the following:

18. The system according to claim 17, wherein the discount amount is based upon a percentage of the invoice amount, the server being configured to calculate another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date, either of the discount amounts being automatically applied based upon time of receipt of the payment input (See, e.g., Specification, ¶ [36]).

Independent claim 22 provides for the following:

22. A server apparatus for providing an on-line billing system, the server apparatus comprising:

means for retrieving customer invoice information that includes an invoice due date and an invoice amount (See, e.g., Specification, ¶¶ [13], [29]-[39]; Figs. 3A-3C, 4A-4E);

means for calculating a discount amount based upon the invoice amount (See, e.g., Specification, ¶¶ [13], [29]-[39]; Figs. 3A-3C, 4A-4E);

means for displaying the calculated discount amount (See, e.g., Specification, ¶¶ [13], [29]-[39]; Figs. 3A-3C, 4A-4E, specifically 4B, item 437, and 4C, item 462); and

means for selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date (See, e.g., Specification, ¶¶ [13], [29]-[39]; Figs. 3A-3C, 4A-4E).

Dependent claim 24 provides for the following:

24. The apparatus according to claim 23, further comprising:

means for calculating an expiration date defining the pre-defined time period, wherein the displaying means displays the expiration date (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 25 provides for the following:

25. The apparatus according to claim 24, wherein the discount amount is based upon a percentage of the invoice amount, the apparatus further comprising:

means for calculating another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date (See, e.g., Specification, ¶ [36]); and

means for automatically applying either of the discount amounts based upon time of receipt of the payment input (See, e.g., Specification, ¶ [36]).

Independent claim 29 provides for the following:

29. A computer-readable medium (See, e.g., Specification, ¶¶ [47]-[49]) carrying one or more sequences of one or more instructions for providing an on-line billing system, the one or



more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

retrieving customer invoice information that includes an invoice due date and an invoice amount (See, e.g., Specification, ¶¶ [14], [29]-[39]; Figs. 3A-3C, 4A-4E);

calculating a discount amount based upon the invoice amount (See, e.g., Specification, ¶¶ [14], [29]-[39]; Figs. 3A-3C, 4A-4E);

displaying the calculated discount amount (See, e.g., Specification, ¶¶ [14], [29]-[39]; Figs. 3A-3C, 4A-4E, specifically 4B, item 437, and 4C, item 462); and

selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date (See, e.g., Specification, ¶¶ [14], [29]-[39]; Figs. 3A-3C, 4A-4E).

Dependent claim 30 provides for the following:

30. The computer-readable medium according to claim 29, wherein the discount amount is valid for a pre-defined time period (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 31 provides for the following:

31. The computer-readable medium according to claim 30, wherein the one or more processors further perform the steps of:

calculating an expiration date defining the pre-defined time period (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484); and

displaying the expiration date (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 32 provides for the following:

32. The computer-readable medium according to claim 31, wherein the discount amount is based upon a percentage of the invoice amount, the one or more processors further performing the steps of:

calculating another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date (See, e.g., Specification, ¶ [36]); and

automatically applying either of the discount amounts based upon time of receipt of the payment input (See, e.g., Specification, ¶ [36]).

Independent claim 36 provides for the following:

36. An early payment discount (EPD) program for an e-billing system including a computer system accessible for on-line interactive communication of invoices to users, said computer system comprising:

a database for storing customer invoice information, said information including an invoice due date and an invoice amount, said invoice information accessible to said customer for on-line interaction (See, e.g., Specification, ¶¶ [12], [26],[27]; Fig. 3B. item 210);

mechanism for calculating an early payment discount amount based on said invoice amount, and displaying for said user, said early payment discount amount and, a modified total

invoice amount reflecting said early payment discount (See, e.g., Specification, ¶¶ [12], [29]-[39]; Figs. 3A-3C, 4A-4E); and,

a mechanism for initiating electronic payment of said modified total invoice amount via said e-billing system, wherein said early payment discount is applied only upon payment within a pre-defined time period of said invoice due date (See, e.g., Specification, ¶¶ [12], [37]-[41]; Figs. 3A-3C, 4A-4E).

Dependent claim 37 provides for the following:

37. The early payment discount program as claimed in Claim 36, wherein said applying mechanism includes a mechanism for calculating an expiration date defining said pre-defined time period and displaying said expiration date for said user (See, e.g., Specification, ¶¶ [41], [42]; Figs. 4D and 4E, item 484).

Dependent claim 39 provides for the following:

39. The early payment discount program as claimed in Claim 38, wherein said early payment discount is another pre-determined percentage of said total invoice amount, and applicable within another pre-defined time period after said expiration date, said calculating mechanism automatically applying said another pre-determined percentage when said user accesses said invoice on-line within said another pre-defined time period (See, e.g., Specification, ¶ [36]).

Dependent claim 40 provides for the following:

40. The early payment discount program as claimed in Claim 39, further including a mechanism to enable scheduling of electronic payment by said user, said early payment discount including said pre-determined percentage when said payment is scheduled within said pre-defined time period, or early payment discount including said another pre-determined percentage when said payment is scheduled within said pre-defined time period (See, e.g., Specification, ¶ [36]).

#### **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 1-3, 5-10, 12-17, 19-24, 26-31, 33-38, and 40-42 are obvious under 35 U.S.C. § 103 based on *Kitchen et al.* (US 6,289,322) in view of *Smith et al.* (PC Computing article, 1992)?

Whether claims 4, 11, 18, 25, 32, and 39 are obvious under 35 U.S.C. § 103 based on *Kitchen et al.* (US 6,289,322) and *Smith et al.* (PC Computing article, 1992) in view of *Business Owner* (1995 article)?

**VII. ARGUMENT**

- A. CLAIMS 1-3, 5-10, 12-17, 19-24, 26-31, 33-38, AND 40-42 ARE NOT RENDERED OBVIOUS BY *KITCHEN ET AL.* AND *SMITH ET AL.* BECAUSE THE REFERENCES FAIL TO DISCLOSE EMPLOYING AN INVOICE DUE DATE TO CALCULATE AND ARRIVE AT A DISCOUNTED AMOUNT IN ACCORDANCE WITH THE INVOICE DUE DATE AND THE SPECIFICALLY CLAIMED RELATIONSHIP BETWEEN THE INVOICE DUE DATE AND THE DISCOUNTED AMOUNT.**
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The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970).

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

The Examiner acknowledges that *Kitchen et al.* lacks any teaching of calculating a discount amount based upon the invoice amount; displaying the calculated discount amount, and selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date. That is, taking independent claim 1 as exemplary, the Examiner acknowledges that the primary reference discloses **only** the claimed

features of an on-line billing system and “retrieving customer invoice information that includes an invoice due date and an invoice amount.”

At the outset, Appellant notes that *Kitchen et al.* nowhere discusses that invoice information taught therein includes “an invoice date and an invoice amount.” The Examiner acknowledges this deficiency in *Kitchen et al.* and argues that *Kitchen et al.* “**inherently** includes an invoice due date and an invoice amount” (Final Office Action-page 4) in the billing system. The mere fact that a certain thing **may** result from a given set of circumstances is not sufficient to establish inherency. *In re Rijckaert*, 28 USPQ2d 1955 (Fed. Cir. 1993). Thus, the mere fact that some invoices may contain an invoice due date and an invoice amount does not necessarily mean that the invoice of *Kitchen et al.* includes such information. Thus, the idea that the primary reference teaches such customer invoice information is speculative, at best. Speculation is not a proper basis on which to conclude obviousness, within the meaning of 35 U.S.C. § 103. For this reason, alone, the Examiner has erred in finding obviousness of the instant claimed subject matter.

Further, the Examiner relies on *Smith et al.* to fill in the substantial gaps of *Kitchen et al.* However, *Smith et al.* is merely an article on accounting and accounting software packages and there is absolutely no disclosure therein of employing an early payment discounts in an “on-line billing system,” as claimed. *Smith et al.* does recite general teachings of “giving discounts for early payments,” “granting discounts for early payments,” and advice to “[l]ook for programs that automatically identify and calculate discounts for early payment.” However, the reference is completely **non-enabling** as to how to perform these recited functions. As such, it is an improper reference with regard to a rejection under 35 U.S.C. § 103 because while it may recite general ideas and desires, such as “granting discounts for early payments,” it fails to teach

anyone skilled in the art exactly how to achieve the desired result or any specific manner of “granting discounts for early payments.” Moreover, the artisan would not have been led in any way to modify *Kitchen et al.* to provide for a discount for early payment because neither of the applied references provides any teaching as to how to perform this function.

While *Smith et al.* may suggest early payment discounts to customers, **in general**, and even that one should look for programs “that automatically identify and calculate discounts for early payment,” such teachings do not suggest the very specific features of the claims, e.g., “calculating a first discount amount **based upon an invoice amount**” (it is noted that the reference says nothing about what the discount is taken on or from), “**displaying** the calculated first discount amount,” and “**selectively receiving a payment input that authorizes a payment** according to the calculated first discount amount in advance of the invoice due date” (claim 1); or “calculating an **expiration date**” and “**displaying the expiration date**” (claim 3); or “**determining whether criteria for receiving the first discount amount are satisfied for a corresponding customer**” and then “**selectively applying** the first discount amount **based upon the determining step**” (claim 5); or wherein the criteria include “**maintaining a zero outstanding charge** by the customer” (claim 6); or “**executing an electronic fund transfer** in response to the step of **selectively receiving the payment input**” (claim 7). These features, and similar features recited in other groups of claims, are clearly not taught or suggested by either one of *Kitchen et al.* or *Smith et al.*

With regard to the system and apparatus claims, since *Smith et al.* discloses no hardware, or any specific means (e.g., “a communication interface,” a “processor coupled to the communication interface,” and “a server apparatus” of claim 8), for performing the generally

disclosed calculation of “discounts for early payment,” the combination of *Kitchen et al.* and *Smith et al.* clearly cannot suggest the instant **system** and **apparatus** claims.

Further, the Examiner does not provide the requisite motivation for making the proposed combination of *Kitchen et al.* and *Smith et al.* The explanation set forth at page 5 of the Final Office Action, i.e., “to improve cash flow and build good will among customers,” is an advantage recognized by Appellant but there is no reason apparent from the teachings of either of the applied references to have calculated a first discount amount based on any invoice amount in *Kitchen et al.*, to have displayed the calculated first discount amount in the system of *Kitchen et al.*, and have selectively received a payment input that authorizes a payment according to the calculated first discount amount in advance of the invoice due date, in *Kitchen et al.* *Kitchen et al.* simply does not provide for these features and a general suggestion in *Smith et al.* of early payment discounts does not provide the motivation for the skilled artisan to have substantially modified *Kitchen et al.* to provide for these claimed features.

The Examiner cites *KSR v. Teleflex*, 127 S.Ct. 1727, 82 USPQ2d at 1396 (2007) as evidence that the teaching-motivation-suggestion (TSM) test for obviousness is incompatible with obviousness standards under 35 U.S.C. § 103 when TSM is applied as a rigid and mandatory formula. *KSR* may have eased the burden on the PTO in reaching a conclusion of obviousness via a less strict TSM test, but even under *KSR*, there must still be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. The generality, “to improve cash flow and build good will among customers,” set forth in the Final Office Action as a rationale for making the combination of references (especially in view of the substantial gaps of the references in disclosing the claimed subject matter, as explained above), fails to provide such **articulated reasoning with some rational underpinning** to support the



legal conclusion of obviousness. As such, the combination of *Kitchen et al.* and *Smith et al.* is improper and the Examiner has erred in making this combination.

Even assuming, *arguendo*, that *Kitchen et al.* disclosed an invoice having “an invoice **due date**” as alleged by the Examiner, which it does not, and even assuming, *arguendo*, that *Kitchen et al.* “inherently” disclosed an invoice having “an invoice due date” as alleged by the Examiner, which it does not because “inherency” cannot be based on speculation, taking this in combination with the very general disclosure of *Smith et al.* of early payment discounts, the instant claimed subject matter would still not have been obvious, within the meaning of 35 U.S.C. § 103.

Each and every claim not only recites an “invoice due date,” but each and every claim then specifically **employs this invoice due date to calculate and arrive at a discounted amount in accordance with this invoice due date, with a specifically claimed relationship between the invoice due date and the discounted amount.** For example, independent claim 1 recites, *inter alia*, “retrieving customer invoice information that includes an invoice **due date** and an invoice amount” and “selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date.” This claimed **relationship between invoice due date and a discounted amount**, i.e., that the “calculated discount amount” is applied if payment is authorized in advance of the “invoice **due date**,” with the “calculated discount amount” being based on the “invoice amount,” is neither disclosed nor suggested by either one of *Kitchen et al.* or *Smith et al.* or the combination thereof.

As noted above, the Examiner relies on *KSR* for a finding of obviousness for subject matter that, in hindsight, seems simple, notwithstanding the lack of evidence to present a *prima facie* case of obviousness. Appellant stresses, again, that while *KSR* may have limited a strict application of the teaching-suggestion-motivation (TSM) test for obviousness, the Supreme

Court did not do away with the requirement of evidence to support a conclusion of obviousness. In fact, under the rationale of KSR, some “articulated reasoning with some rational underpinnings” is required for a conclusion of obviousness. Since the claimed **relationship between an invoice due date and a discounted amount** is neither disclosed nor suggested by either one of *Kitchen et al.* or *Smith et al.* or the combination thereof, and the Examiner has not articulated any reasoning, with some rational underpinning, for finding the claimed subject matter obvious in spite of this deficiency by the applied references, **no prima facie case of obviousness has been established.**

To conclude, as the Examiner does, that one “would have been motivated to improve cash flow and build good will among customers” (Final Office Action-page 5) is to deal in mere generalities. The fact that all business would like to “increase cash flow and build good will among customers” does not explain what would have led the skilled artisan to modify *Kitchen et al.* in the specific manner claimed to employ an invoice **due date** (which *Kitchen et al.* does not even teach or suggest) to calculate an early discount amount. The general teaching by *Smith et al.* regarding “giving discounts for early payments” does not, *per se*, suggest to artisans any specific modification to the system of *Kitchen et al.* in order to provide such discounts by specifically calculating those discounts in accordance with an invoice **due date**.

While it may appear a simple matter, in hindsight, viewing Appellant’s disclosure as a guide, to use an invoice due date to actually calculate a discounted amount and to selectively receive a payment input that authorizes a payment according to the calculated discount amount in advance of that invoice due date, this is not the test for obviousness, within the meaning of 35 U.S.C. § 103.

Each of the pending claims recites a **relationship between the “invoice amount,” the “calculated discount amount,” and the “invoice due date.”** That is, taking claim 1 as exemplary, the claim recites “retrieving customer invoice information”, “calculating a discount amount based upon the invoice amount,” and “displaying the calculated discount amount.” By way of example, a customer may then selectively make a “payment input.” This “payment input” is not the payment, *per se*, but rather the payment input “authorizes a payment according to the calculated discount amount in advance of the invoice due date.” That is, for example, a customer may input some signal, which actually authorizes a payment of the bill. But the actual payment made, or authorized, can be the “invoice amount” or something less than the “invoice amount.” The actual amount of payment may be less than the “invoice amount,” i.e., the “calculated discount amount,” if the payment is authorized “in advance of the invoice due date.” Thus, if a customer pays his/her bill prior to the invoice due date, the required payment will not be the full amount of the invoice amount, but rather, the “calculated discount amount.”

Accordingly, there is a specific relationship between the claimed “calculated discount amount,” the claimed “invoice amount” and the claimed “invoice due date.” The “calculated discount amount” is applied if payment is authorized in advance of the “invoice due date,” with the “calculated discount amount” being based on the “invoice amount.”

Independent claims 8, 15, 22, and 29 all recite the interrelationship between the claimed “calculated discount amount,” “invoice amount,” and “invoice due date.” Additionally, independent claim 36 more specifically recites “an early payment discount” calculated on the “invoice amount” wherein “the early payment discount is applied only upon payment within a pre-defined time period of said invoice due date.”

Even if the applied references disclose or suggest, in general, invoices, invoice due dates, and calculated discount amounts, these elements are not disclosed or suggested by the applied references in the specific manner recited in the instant claims, wherein there is a particular recited interrelationship between, and among, the “calculated discount amount,” “invoice amount,” and “invoice due date” elements.

Since the claimed relationship between an invoice due date and a discounted amount is neither disclosed nor suggested by either one of *Kitchen et al.* or *Smith et al.* or the combination thereof, and the Final Office Action has not articulated any reasoning, with some rational underpinning, for finding the claimed subject matter obviousness in spite of this deficiency by the applied references, no *prima facie* case of obviousness has been established.

The general teaching by *Smith et al.* regarding “giving discounts for early payments” does not, *per se*, suggest to artisans any specific modification to the system of *Kitchen et al.* in order to provide such discounts by specifically calculating those discounts based upon the invoice amount and authorizing payment of the calculated discount amount if payment is made in advance of the invoice due date.

Furthermore, viewing, in hindsight, Appellant’s disclosure as a guide, (to use an invoice due date to actually calculate a discounted amount and to selectively receive a payment input that authorizes a payment according to the calculated discount amount in advance of that invoice due date), is impermissible and is not the test for obviousness, within the meaning of 35 U.S.C. § 103.

Such reasoning applies *a fortiori* with regard to claims 2, 3, 9, 10, 16, 17, 24, 30, 31, 36, 37, and 40, for example, where a “**pre-defined time period**” is used to determine the validity time of a discount amount. No such “pre-defined time period” is disclosed or suggested by either

of the applied references. Therefore, the Examiner has erred in the rejection of these claims under 35 U.S.C. § 103.

The rejection of claims 1-3, 5-10, 12-17, 19-24, 26-31, 33-38, and 40-42 must be reversed, because neither *Kitchen et al.* nor *Smith et al.*, or the combination thereof, discloses the features of these claims.

**B. CLAIMS 4, 11, 18, 25, 32, AND 39 ARE NOT RENDERED OBVIOUS BY *KITCHEN ET AL.*, *SMITH ET AL.*, AND *BUSINESS OWNER* BECAUSE THE REFERENCES FAIL TO DISCLOSE, WHEREIN A DISCOUNT AMOUNT IS BASED ON A PERCENTAGE OF THE INVOICE AMOUNT AND ADDITIONAL DISCOUNT AMOUNTS ARE CALCULATED BASED UPON ANOTHER PERCENTAGE OF THE INVOICE AMOUNT, WITH THE AUTOMATIC APPLICATION OF EITHER OF THE DISCOUNT AMOUNTS BASED UPON TIME OF RECEIPT OF THE PAYMENT INPUT.**

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With regard to claims 4, 11, 18, 25, 32, and 39, the Examiner acknowledges that the combination of *Kitchen et al.* and *Smith et al.* still fails to teach or suggest the feature of calculating a “second discount amount being associated with another expiration date” and “automatically applying either of the first and second discount amounts based upon time of receipt of the payment input” (e.g., claim 4). Therefore, the Examiner relies on the *Business Owner* article to supply these features. In particular, the Examiner relies on page 17 of *Business Owner*. In the portion of that page, labeled “#2. Promote early payment discounts,” there is a disclosure of opting to provide a discount of “2% within 10 days, net 30” with some discussion as to how this represents a certain interest rate return to the customer and a certain cost of capital to the vendor. At the end of that portion of the reference, there is a listing of interest rate savings for “other typical early-payment formulas,” including “1%/10 days, net 30=18.2%, 2%/10 days, net 45=20.8%, and 2%/10 days, net 60=14.6%.” However, while these are examples of different

possible discounts, there is absolutely no disclosure or suggestion, within *Business Owner*, of “first **and** second discount amounts,” as required by the claims. An example in the reference of using either a 1% or 2% early payment discount is clearly no disclosure or suggestion of calculating two **different** discount amounts, **based upon different percentages of the invoice amount**, wherein the different discount amounts are **associated with different expiration dates**, and then, “**automatically applying either of the first and second discount amounts based upon time of receipt of the payment input**,” as claimed.

Since *Kitchen et al.* and *Smith et al.* fail to teach certain claim features, for the reasons given above, and *Business Owner*, used for an alleged teaching of a discount amount based upon a percentage of the invoice amount, fails to provide for these deficiencies, no *prima facie* case of obviousness has been established by the Examiner.

Further, as to claims 4, 11, 18, 25, 32, and 39, where the **discount amount is based on a percentage of the invoice amount and additional discount amounts are calculated based upon another percentage of the invoice amount, with the automatic application of either of the discount amounts based upon time of receipt of the payment input**, none of these features is suggested by the applied references, or by any combination thereof, and it is clearly impermissible hindsight for the Examiner to conclude that they are.

Again, while the Examiner relies on page 17 of *Business Owner* for these features, *Business Owner* merely discloses examples of different discounts. There is no disclosure therein of “a discount amount” **and** “another discount amount,” as required by the claims.

Accordingly, since none of the applied references suggest the features of claims 4, 11, 18, 25, 32, and 39, i.e., the use of two different discount amounts, these claims are separately

patentable from the claims upon which they depend. Therefore, the Examiner has erred in the rejection of these claims under 35 U.S.C. § 103.

The rejection of claims 4, 11, 18, 25, 32, and 39 must be reversed, because neither *Kitchen et al.* nor *Smith et al.* nor *Business Owner*, or any combination thereof, discloses the features of these claims.

### **VIII. CONCLUSION AND PRAYER FOR RELIEF**

For the foregoing reasons, Appellant requests the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. §1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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May 11, 2009  
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**IX. CLAIMS APPENDIX**

1. A method for providing an on-line billing system, the method comprising:  
retrieving customer invoice information that includes an invoice due date and an invoice amount;  
calculating a discount amount based upon the invoice amount;  
displaying the calculated discount amount; and  
selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date.
2. The method according to claim 1, wherein the discount amount is valid for a pre-defined time period.
3. The method according to claim 2, further comprising:  
calculating an expiration date defining the pre-defined time period; and  
displaying the expiration date.
4. The method according to claim 3, wherein the discount amount is based upon a percentage of the invoice amount, further comprising:  
calculating another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date; and  
automatically applying either of the discount amounts based upon time of receipt of the payment input.



5. The method according to claim 1, further comprising:  
determining whether criteria for receiving the discount amount are satisfied for a corresponding customer; and  
selectively applying the discount amount based upon the determining step.
6. The method according to claim 5, wherein the criteria in the determining step include maintaining a zero outstanding charge by the customer.
7. The method according to claim 1, further comprising:  
executing an electronic fund transfer in response to the step of selectively receiving the payment input.
8. A server apparatus for providing an on-line billing system, the server apparatus comprising:  
a communication interface configured to retrieve customer invoice information that includes an invoice due date and an invoice amount; and  
a processor coupled to the communication interface and configured to calculate a discount amount based upon the invoice amount, wherein the calculated discount amount is displayed via a client, and a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date is selectively received from the client.

9. The server apparatus according to claim 8, wherein the discount amount is valid for a pre-defined time period.

10. The server apparatus according to claim 9, wherein the processor is configured to calculate an expiration date defining the pre-defined time period, the expiration date being displayed via the client.

11. The server apparatus according to claim 10, wherein the discount amount is based upon a percentage of the invoice amount, the processor being configured to calculate another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date, either of the discount amounts being automatically applied based upon time of receipt of the payment input.

12. The server apparatus according to claim 8, wherein the processor is configured to determine whether criteria for receiving the discount amount are satisfied for a corresponding customer, and to selectively apply the discount amount based upon the determination.

13. The server apparatus according to claim 12, wherein the criteria include maintaining a zero outstanding charge by the customer.

14. The server apparatus according to claim 8, wherein the processor is configured to initiate an electronic fund transfer in response to receipt of the payment input.

15. An e-billing system comprising:

a database configured to store customer invoice information that includes an invoice due date and an invoice amount;

a server communicating with the database, the server being configured to retrieve the customer invoice information from the database, the server being configured to calculate a discount amount based upon the invoice amount; and

a client communicating with the server, the client being configured to display the discount amount, and to transmit a payment input that authorizes a payment according to the calculated discount amount to the server in advance of the invoice due date.

16. The system according to claim 15, wherein the discount amount is valid for a pre-defined time period.

17. The system according to claim 16, wherein the server is configured to calculate an expiration date defining the pre-defined time period, the expiration date being displayed via the client.

18. The system according to claim 17, wherein the discount amount is based upon a percentage of the invoice amount, the server being configured to calculate another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date, either of the discount amounts being automatically applied based upon time of receipt of the payment input.

19. The system according to claim 15, wherein the server is configured to determine whether criteria for receiving the discount amount are satisfied for a corresponding customer, and to selectively apply the discount amount based upon the determination.

20. The system according to claim 19, wherein the criteria include maintaining a zero outstanding charge by the customer.

21. The system according to claim 15, wherein the server is configured to initiate an electronic fund transfer in response to receipt of the payment input.

22. A server apparatus for providing an on-line billing system, the server apparatus comprising:

means for retrieving customer invoice information that includes an invoice due date and an invoice amount;

means for calculating a discount amount based upon the invoice amount;

means for displaying the calculated discount amount; and

means for selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date.

23. The apparatus according to claim 22, wherein the discount amount is valid for a pre-defined time period.

24. The apparatus according to claim 23, further comprising:

means for calculating an expiration date defining the pre-defined time period, wherein the displaying means displays the expiration date.

25. The apparatus according to claim 24, wherein the discount amount is based upon a percentage of the invoice amount, the apparatus further comprising:

means for calculating another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date; and

means for automatically applying either of the discount amounts based upon time of receipt of the payment input.

26. The apparatus according to claim 22, further comprising:

means for determining whether criteria for receiving the discount amount are satisfied for a corresponding customer; and

means for selectively applying the discount amount based upon the determination.

27. The apparatus according to claim 26, wherein the criteria include maintaining a zero outstanding charge by the customer.

28. The apparatus according to claim 22, further comprising:

means for executing an electronic fund transfer in response to the receipt of the payment input.

29. A computer-readable medium carrying one or more sequences of one or more instructions for providing an on-line billing system, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

retrieving customer invoice information that includes an invoice due date and an invoice amount;

calculating a discount amount based upon the invoice amount;

displaying the calculated discount amount; and

selectively receiving a payment input that authorizes a payment according to the calculated discount amount in advance of the invoice due date.

30. The computer-readable medium according to claim 29, wherein the discount amount is valid for a pre-defined time period.

31. The computer-readable medium according to claim 30, wherein the one or more processors further perform the steps of:

calculating an expiration date defining the pre-defined time period; and

displaying the expiration date.

32. The computer-readable medium according to claim 31, wherein the discount amount is based upon a percentage of the invoice amount, the one or more processors further performing the steps of:

calculating another discount amount based upon another percentage of the invoice amount, the another discount amount being associated with another expiration date; and

automatically applying either of the discount amounts based upon time of receipt of the payment input.

33. The computer-readable medium according to claim 29, wherein the one or more processors further perform the steps of:

determining whether criteria for receiving the discount amount are satisfied for a corresponding customer; and

selectively applying the discount amount based upon the determining step.

34. The computer-readable medium according to claim 33, wherein the criteria in the determining step include maintaining a zero outstanding charge by the customer.

35. The computer-readable medium according to claim 29, wherein the one or more processors further perform the step of:

executing an electronic fund transfer in response to the step of selectively receiving the payment input.

36. An early payment discount (EPD) program for an e-billing system including a computer system accessible for on-line interactive communication of invoices to users, said computer system comprising:

a database for storing customer invoice information, said information including an invoice due date and an invoice amount, said invoice information accessible to said customer for on-line interaction;

mechanism for calculating an early payment discount amount based on said invoice amount, and displaying for said user, said early payment discount amount and, a modified total invoice amount reflecting said early payment discount; and,

a mechanism for initiating electronic payment of said modified total invoice amount via said e-billing system, wherein said early payment discount is applied only upon payment within a pre-defined time period of said invoice due date.

37. The early payment discount program as claimed in Claim 36, wherein said applying mechanism includes a mechanism for calculating an expiration date defining said pre-defined time period and displaying said expiration date for said user.

38. The early payment discount program as claimed in Claim 37, wherein said early payment discount is a pre-determined percentage of said total invoice amount, and applicable during the pre-defined time period from said invoice date, said calculating mechanism automatically applying said pre-determined percentage when said user accesses said invoice on-line within said pre-defined time period.

39. The early payment discount program as claimed in Claim 38, wherein said early payment discount is another pre-determined percentage of said total invoice amount, and applicable within another pre-defined time period after said expiration date, said calculating



mechanism automatically applying said another pre-determined percentage when said user accesses said invoice on-line within said another pre-defined time period.

40. The early payment discount program as claimed in Claim 39, further including a mechanism to enable scheduling of electronic payment by said user, said early payment discount including said pre-determined percentage when said payment is scheduled within said pre-defined time period, or early payment discount including said another pre-determined percentage when said payment is scheduled within said pre-defined time period.

41. The early payment discount program as claimed in Claim 36, wherein a customer has associated EPD qualify criteria, said calculating mechanism applying said early payment discount amount when said user meets said qualify criteria.

42. The early payment discount program as claimed in Claim 41, wherein an EPD qualify criteria includes a customer maintaining a zero outstanding charge.

**X. EVIDENCE APPENDIX**

Appellant is unaware of any evidence that is required to be submitted in the present Evidence Appendix.

**XI. RELATED PROCEEDINGS APPENDIX**

Appellant is unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.